

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IE2004/000143

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61K35/74 A61P13/00 A61P15/14 A61P17/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, PAJ, MEDLINE, EMBASE, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 207 411 B1 (RYAN MARIE PHILIPPA ET AL) 27 March 2001 (2001-03-27) column 16, line 33 - line 59 column 4, line 9 - line 21 column 17, line 26 - line 32; table 1	1-27
Y	TWOMEY DP ET AL: "Protection against Staphylococcus aureus Mastitis in dairy cows using a Bismuth-based teat seal containing the bacteriocin, lacticin 3147" JOURNAL OF DAIRY SCIENCE, XX, US, vol. 83, no. 9, September 2000 (2000-09), pages 1981-1988, XP002189812 ISSN: 0022-0302 cited in the application the whole document	1-27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

5 January 2005

Date of mailing of the international search report

21/01/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Langer, A

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International Application No

PCT/IE2004/000143

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	HEIKKILA M P ET AL: "Inhibition of Staphylococcus aureus by the commensal bacteria of human milk." JOURNAL OF APPLIED MICROBIOLOGY, vol. 95, no. 3, 2003, pages 471-478, XP002312462 ISSN: 1364-5072 Abstracttables 1,2	1-27
X	WO 96/38159 A (LAFOR LAB LTD) 5 December 1996 (1996-12-05)	1-3,7
Y	claims	1-27
X	DATABASE WPI Section Ch, Week 200381 Derwent Publications Ltd., London, GB; Class B04, AN 2003-869105 XP002312464 & JP 2003 259860 A (ZENG M J) 16 September 2003 (2003-09-16)	8-12, 18-21, 25-27
Y	abstract	1-27
X	US 5 804 179 A (REID GREGOR ET AL) 8 September 1998 (1998-09-08)	1,3,7, 14,18, 19,22, 25-27
Y	claims; examples	1-27
A	ALVAREZ-OLMOS M I ET AL: "Probiotic agents and infectious diseases: a modern perspective on a traditional therapy" CLINICAL INFECTIOUS DISEASES, THE UNIVERSITY OF CHICAGO PRESS, CHICAGO, IL, US, vol. 32, 1 June 2001 (2001-06-01), pages 1567-1576, XP002903346 ISSN: 1058-4838 the whole document	
A	CROSS MARTIN L: "Microbes versus microbes: Immune signals generated by probiotic lactobacilli and their role in protection against microbial pathogens." FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, vol. 34, no. 4, 13 December 2002 (2002-12-13), pages 245-253, XP002312463 ISSN: 0928-8244 the whole document	
	-/-	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>KIM JI YEON ET AL: "Screening for antiproliferative effects of cellular components from lactic acid bacteria against human cancer cell lines" BIOTECHNOLOGY LETTERS, vol. 24, no. 17, September 2002 (2002-09), pages 1431-1436, XP009042191 ISSN: 0141-5492 the whole document</p> <p>-----</p>	
A	<p>PARENTE E ET AL: "A comparison of factors affecting the production of two bacteriocins from lactic acid bacteria" JOURNAL OF APPLIED BACTERIOLOGY, vol. 73, no. 4, 1992, pages 290-298, XP009042198 ISSN: 0021-8847 the whole document</p> <p>-----</p>	

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/IE2004/000143

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6207411	B1	27-03-2001	IE 950269 A2	16-10-1996
			AU 712143 B2	28-10-1999
			AU 5408196 A	30-10-1996
			EP 0821736 A1	04-02-1998
			WO 9632482 A1	17-10-1996
			JP 11511648 T	12-10-1999
			NZ 305941 A	28-01-1999
WO 9638159	A	05-12-1996	US 5733568 A	31-03-1998
			AU 702799 B2	04-03-1999
			AU 5963196 A	18-12-1996
			BR 9609460 A	02-03-1999
			CA 2222642 A1	05-12-1996
			CN 1192151 A , B	02-09-1998
			EA 412 B1	24-06-1999
			EP 0828499 A1	18-03-1998
			HU 9900682 A2	28-06-1999
			IL 118304 A	13-08-2000
			JP 11506451 T	08-06-1999
			NZ 309456 A	23-02-2001
			PL 323748 A1	14-04-1998
			TW 480174 B	21-03-2002
			WO 9638159 A1	05-12-1996
			US 5614209 A	25-03-1997
			US 5635202 A	03-06-1997
			US 5633012 A	27-05-1997
			ZA 9603810 A	03-01-1997
JP 2003259860	A	16-09-2003	KR 2003072812 A	19-09-2003
US 5804179	A	08-09-1998	US 6180100 B1	30-01-2001
			US 5705160 A	06-01-1998
			CA 1298556 C	07-04-1992